MODIS Science Data Support Team (SDST) Meeting Minutes 10/25/91

ATTENDEES: Lloyd Carpenter   RDC   982-3708
              Al Fleig   900   286-7747
              Harold Geller   RDC   982-3740
              Tom Goff   RDC   982-3704
              Liam Gumley   RDC   982-3748
              Lou Kouvaris   Hughes   464-7365
              Al McKay   RDC   982-3720
              Jim Ormsby   974   286-6811
              Anand Swaroop   STX   513-1607
              Wil Webster   920.2   286-4506

NEXT MEETING: Date   Time   Building   Room   Friday,
November 8   10:00 am   16   242

TOPICS:

1. MODIS AIRBORNE SIMULATOR (MAS) AND NETCDF FORMAT: A complete
MAMS flight track has been calibrated, geolocated, and written in netCDF
on the LTP VAX. The 37,230,254-byte netCDF file contains all of the
Level-1B data for 1939 scan lines. The software is ready for operational
processing of MAS flight mission data. Updating and fine tuning of the
software will be based upon operational experience. Data from an MAS
test flight scheduled for October 28th is expected from Ames in a few
days. Quick turn-around is planned for the data from the FIRE experiment
(first possible flight on November 13th). Spectral response data for the
thermal infrared channels have not yet been received from Daedalus. If
this information is not received in time, spectral response functions can
be simulated based upon "half-power points" which Jeff Myers at Ames
has for the infrared channels.

The known processing systems to be used by GSFC MAS investigators for
MAS Level-1B data are the IBM 3090 (MVS operating system), Hewlett
Packard 720, Silicon Graphics Iris, and the Cray (Unicos operating
system). The corresponding display systems are the Apple Macintosh and
the Silicon Graphics Iris.

The first version of the C program to generate the MAS netCDF file has
been completed and verified on the LTP VAX. Approximately 20 minutes
are required to transform the data from a 2000-line flight track. Program

enhancements and utility programs are being developed.

2. MODIS SCIENCE COMPUTING FACILITY PLAN: Al McKay presented a development plan and schedule for the MODIS Team Leader Science Computing Facility Plan. Documented requirements are being reviewed, and key EOSDIS, MODIS and other EOS instrument personnel are being interviewed. Hardware, software, and communications requirements will be analyzed. A "strawman" report is scheduled for January 3, 1992

3. MODIS SDST PROJECT PLAN: Significant progress was reported on the development of the Objectives, Related Activities, and Technical Plan sections of the MODIS Science Data Support Team Project Plan. An updated copy was included in the handout. The Plan will include special consideration of the following topics:

Algorithm delivery (Versions 0, 1, and 2. Rehost all three),

Guidelines for algorithms provided to SDST by Team Members,

Work Schedule from the time algorithms are delivered to SDST to the time the SDST delivers to EOSDIS,

Quality Assurance of software,

Review Plan

Consensus algorithms reviewed by Team Members,

Team Members review SDST implementation of their code,

Documentation and Optimization,

Training.

4. MODIS IMAGE REGISTRATION: Jim Ormsby presented an update to his table of image registration comparisons, adding for each package, the human involvement required, the accuracy (in pixels), and the name and telephone number of the contact person. Two additional packages were added to the table.

ACTION ITEMS:

08/30/91 [Lloyd Carpenter and Team]: Draft a schedule of work for the next 12 months. Include primary events and milestones, documents to be produced, software development, MAS support, etc. (An update was included in the handout.) STATUS: Open. Due date 09/27/91.

10/04/91 [Phil Ardanuy and Team]: Prepare questions for the project to characterize the spacecraft position and attitude knowledge and the MODIS pointing knowledge in a way that will facilitate the evaluation of methods such as image registration to meet the science team requirements for earth location. (A letter to the project has been prepared, 10/28/91.) STATUS: Open. Due date 10/18/91.

10/04/91 [Tom Goff]: Examine and describe the Miami DSP navigation scheme in relation to MODIS navigation. Status: Open. Due date 11/15/91.

10/04/91 [Tom Goff]: Contact Angel Li (currently at GSFC) to ask questions regarding the DSP. Status: Open. Due date 10/18/91.